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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,159	01/28/2004	Alex Kuo-Shen Wang	1211050	4641

7590 11/28/2005

PRO-TECHTOR INTERNATIONAL
20775 Norada Court
Saratoga, CA 95070-3018

EXAMINER

MARTIN, LAURA E

ART UNIT PAPER NUMBER

2853

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/767,159	Applicant(s) WANG, ALEX KUO-SHEN	
	Examiner Laura E. Martin	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hilton (US 6276788) in view of Mochizuki et al. (US 5477963) and Childers et al. (US 6619789).

Hilton teaches an inkjet printer ink cartridge comprising a plastic case (C5, L24-25), a top cover (47), a strainer (43), a spring (16), and a rubber washer (34) that connects with the nozzle area (64), wherein ink can be injected into a receptacle (100/101) of the ink cartridge through ink inject holes (102) of the top cover. Hilton also teaches a siphon (68) that is configured within the receptacle of the ink cartridge, and an opening of a lower extremity (64) of the siphon realizes a mutual passage with the receptacle, due to a siphon principle, leakage of the ink from area of the ink cartridge in contact with the nozzle area is prevented, furthermore, the ink is prevented from spilling from the siphon (C5, L17+). Hilton also teaches the siphon can be additionally peripherally configured with an inner tube (siphon tube) and an outer tube (104), whereby an air hole is formed between the inner tube and the outer tube, and the air hole realizes a mutual passage with the siphon.

Hilton does not teach a strainer configured in a bottom of a receptacle circumjacent to a wall or a siphon with the upper extremity having a mutual passage with air external to the ink cartridge.

Mochizuki et al. teaches a strainer (17) configured to a bottom of the receptacle, a groove below the strainer wherein the strainer is circumjacently configured with a wall (Fig 2) such that when ink level of the ink within the receptacle is lower (3) than the level of the strainer, the wall counter checks the ink from leaking out (C7, L4-5).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the disclosures of Hilton and Mochizuki et al. to better clean the ink before printing.

Childers et al. teaches a siphon with the upper extremity having a mutual passage with air external to the ink cartridge (28).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Hilton with that of Childers et al. in order to prolong the life of the cartridge.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hilton (US 6276788), Mochizuki et al. (US 5477963), and Childers et al. (US 6619789) as applied to claims 1-3 above, and further in view of Quingguo et al. (US 2003/0107626).

Hilton teaches the receptacle of the ink cartridge (100/101) not being provided with a sponge, and the ink is injected into the receptacle by means of an ink filling instrument (104). However, it does not teach ink continually injected to a refill line.

Quingguo et al. teaches injecting ink to a refill line, whereupon refilling is stopped (P191).

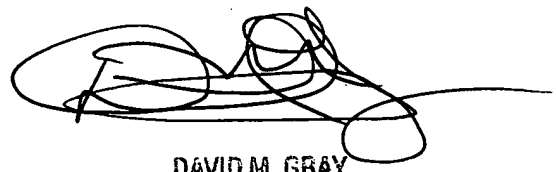
It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus of claims 1-3 with the teachings of Quingguo et al. in order to accurately refill an ink cartridge.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura E. Martin whose telephone number is (571) 272-2160. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David M. Gray can be reached on (571) 272-2119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura E. Martin



DAVID M. GRAY
PRIMARY EXAMINER